MARKET MECHANISMS FOR WHITE CERTIFICATES TRADING: A IEA-DSM INTERNATIONAL ACTIVITY

Antonio Capozza
CESI
T&D Networks
A national energy policy which involves:

Energy Saving programmes on energy end-uses
STEP I

A Public Board (e.g. Governmental) defines:

- Energy saving national targets (e.g. Mtoe/year)
- Eligible Energy Saving Projects
- Obligation-bound actors (OB)
- Allocation of the global targets on OB’s
- Eligible implementers of Energy Saving Projects (EI)
STEP II

Equivalence between attained target and a proportional amount of **White Certificates** (WhC)

\[
\begin{align*}
N \text{ saved energy units} & \quad \leftrightarrow \quad M \text{ White Certificates}
\end{align*}
\]

*“White certificates”: certificates issued by independent certifying bodies confirming the claims of market actors for savings of energy, as a consequence of energy end-use efficiency measures* (From *Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on energy end-use efficiency and energy services*)
OB must comply with a WhC target obligation: WhC demand

EI may gain and own WhC: WhC supply
STEP III

A market can be established where WhC demand and offer match:

**OB** can buy lacking WhC to reach their target

**EI** can sell their WhC surplus, since:
- they have no target to match
- they gained WhC above their target
General Scheme

Public board: mandatory EE (=WhC) targets

- Obligation-bound actor (OB)
  - OB1

- Eligible Implementer (EI)
  - EI1
  - EI3
  - EI2
  - EI_M

- WhC excess
- Gained WhC

Marketplace
MATTER TO BE DISCUSSED

Obligation-bound actors = WhC target fulfilment: who?

– producers?
– distributors (e.g. in Italy, distributors over a threshold)?
– retailers?
– energy/fuel suppliers?
– consumers?
MATTER TO BE DISCUSSED

Eligible implementers of Energy Saving Projects = WhC gain:

who?

– obligation-bound actors?
– exempted actors (e.g. distributors below the threshold)?
– energy services companies (ESCO)? minimum requirements? official register?
– consumers? all? only large ones?
– market intermediaries?
– any economic actor? over a threshold?
Allocation criteria for Energy Savings targets on OB (= WhC targets) :
how?
– number of served customers?
– volume of distributed energy?
– turnover?
MATTER TO BE DISCUSSED

Eligible (= WhC generating) Energy Saving Projects:
what about:

– criteria
– size
– evaluation of the saving impact = n. of WhC generated
– persistence of the saving effects
– additionality (how to prevent from free-riders)
  • based on standards in force?
  • based on increase of turnover?
  • based on innovation?
  • based on present market?
– monitoring mechanisms (duration, responsibilities)
MATTER TO BE DISCUSSED

Non-compliance regime

– grace periods,
– penalties,
– etc

Trading mechanisms:

– participants to the market
– lifetime of certificates
– frequency of transactions
– safety rules
– banking
– borrowing/grandfathering (if applicable)
MATTER TO BE DISCUSSED

Chance of extra-national enlarged market:
  – within EU (Proposal EU Directive on EE in end-uses)
  – within OCDE

Interaction with other EE policy tools

Interaction with other trading schemes:
  – Renewable Energy Commitment scheme (Green Certificates Trading)
  – Carbon trading scheme (Black Certificates Trading)

Possible cost-recovery mechanisms

Rebound effects (unexpected upshots)
Objective of Task XIV

- Deeper insight
- Discussions and exchange of experiences through:
  - periodical experts meetings
  - open workshops

on a group of items belonging to the above:

“MATTER TO BE DISCUSSED”
Approach

- Regular events made up of:
  - one-day thematic open workshop with national stakeholders
  - a “day after” restricted meeting of designated task experts
## Approach

<table>
<thead>
<tr>
<th>Event</th>
<th>Workshop</th>
<th>Workshop subject</th>
<th>Task experts meeting subject</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NO</td>
<td></td>
<td>- Kick-off.</td>
<td>7-8 June 04 Milano Italy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Task organisation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Preparation of the following workshop</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>YES</td>
<td>Existing experiences and expectations at national level</td>
<td>- Discussion on the past workshop</td>
<td>8-9 Nov 04 London UK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Preparation of the following workshop</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>YES</td>
<td>Policy/principle issues</td>
<td>- Discussion on the past workshop</td>
<td>14-15 April 05 Paris - France</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- First ideas on the Final Report</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Preparation of the following workshop</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>YES</td>
<td>Organisation / practical issues: National or international systems for White Cert.?</td>
<td>- Discussion on the past workshop</td>
<td>15-17 June 05 Lund Sweden</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Comparisons among national procedures for evaluation of Energy Savings</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Comparisons among national schemes on White Certificates</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Preparation of the following workshop</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>YES</td>
<td>Organisation / practical issues: additionality, penalties, costs</td>
<td>- Discussion on national procedures for evaluation of Energy Savings</td>
<td>26-28 Oct. 05 Groningen Netherlands</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Discussions on organisation and contents of the Final Synthesis Report</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Discussion on the present workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Preparation of the following workshop</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>YES</td>
<td>Interactions with other schemes/ EE policies.</td>
<td>- Discussion on the present workshop</td>
<td>22-24 Mar. 06 Trondheim Norway</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Follow-ups from EU EuroWhiteCert project</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Comments, revision and finalisation of draft Final Synthesis Report</td>
<td></td>
</tr>
</tbody>
</table>
## Schedule of activities

Updated timetable of events and deliverables

<table>
<thead>
<tr>
<th>Event</th>
<th>June 04</th>
<th>November 04</th>
<th>January 05</th>
<th>April 05</th>
<th>June 05</th>
<th>October 05</th>
<th>January 06</th>
<th>March 06</th>
<th>June 06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliverable</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>FR</td>
</tr>
</tbody>
</table>

CS = Critical Synthesis (INTERIM) Report of the event  
FR = Final Synthesis Report
Involved Parties

France
Italy
The Netherlands
Norway
Sweden
UK

Academia: Central European University - Budapest (as observer)
IEA-DSM Task XIV - MORE INFO?

• SEE TASK XIV WEBSITE

http://dsm.iea.org/NewDSM/Work/Tasks/14/task14.asp

• anyone is welcome as guest to share non-restricted information through the Task 14 Forum - ask OA
Task XIV: Market Mechanisms for White Certificates Trading

http://dsm.iea.org/NewDSM/Work/Tasks/14/WhiteCertificates.htm

Market-based policies for accelerating energy efficiency programmes

- Send this to a colleague

General goal
This project ("Task") aims to address:

- whether - and how - a scheme involving the issuing and the trading of White Certificates (WhC) provides an effective means of attaining targets of reduction of:
  1. primary energy consumption (main concern)
  2. CO2 emissions (secondarily)
- what is the most suitable format for such a scheme
- what implementation problems are involved, at national and extra-national levels
- how it can interact with other schemes.

Questions to be addressed
Policy and operational issues will considered throughout the task Principle (Policy) issues

1. Specificity and effectiveness of a certificate trading mechanism to promote energy efficiency projects
Thank you

Antonio Capozza

CESI
T&D Networks
Energy Trading
Via Rubattino, 54 - 20134 Milano
ph. +39 02 2125 5016
fax +39 02 2125 5597
e-mail capozza@cesi.it
website http://www.cesi.it